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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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Federal Communications Commission
Office of Secretary

In the Matter of)

Amendment of the Commission's Rules to)
Provide for Operation of Unlicensed NII)
Devices in the 5 GHz Frequency Range)

ET Docket No. 96-102
RM-8648
RM-8653

CONSOLIDATED REPLY TO OPPOSITIONS TO
PETITION FOR RECONSIDERATION

Hewlett-Packard Company ("HP") hereby replies to the oppositions to its petition for reconsideration of the Report and Order in the above-referenced proceeding (the "U-NII Report and Order"), filed by AirTouch Communications, Inc. ("AirTouch"), AT&T Corporation ("AT&T"), ICO Global Communications and COMSAT Corporation (the "Joint Commenters") and L/Q Licensee, Inc. ("LQL").

HP's petition contains a relatively simple request. In the U-NII Report and Order, the Commission stated that it would consider revising the U-NII power limits for the 5.15-5.25 GHz if European High Performance Radio LAN ("HIPERLAN") systems proliferate and are authorized to operate at higher power levels than U-NII devices. HP's petition brings to the Commission's attention the fact that the European Telecommunications Standards Institute ("ETSI") HIPERLAN standard already authorizes operation at 30 dBm (or one watt), and that twenty CEPT member countries already have committed themselves to apply the terms of the

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European Radiocommunications Committee's HIPERLAN decision, including the ETSI HIPERLAN standard.

Several of the parties opposing HP's petition challenge HP's premise and incorrectly assert that Europe has not yet adopted a one watt power limit for 5.15-5.25 HIPERLAN transmitters. The facts, however, are otherwise.

As set out in the attached Declaration of Timothy Wilkinson, Project Manager, in the Personal Systems Laboratory, HP Laboratories, Bristol, United Kingdom ("Wilkinson Declaration"), the ETSI Technical Specification Standard for HIPERLAN, ETS 300-652, which went into effect on July 1, 1996, contains specifications for three transmit power levels: Class A, 10 mW (10 dBm); Class B, 100 mW (20 dBm), and Class C, 1 watt (30 dBm). As discussed in HP's petition, and as evidenced by the European Radio Committee document cited therein, and discussed in the Wilkinson Declaration, twenty European countries already have signed an agreement to support this standard in full, including *all* of the power levels contained in it.

The ETSI type-approval documents, which set forth the methods for testing HIPERLAN products to assure compliance with ETS 300 652, confirm that HIPERLAN devices operating at up to one watt of power are permitted under the July 1, 1996 ETSI standard.

The Wilkinson Declaration demonstrates that HP also has verified its understanding of the current status of the HIPERLAN standard with officials at the United Kingdom Radiocommunications Agency ("UK RA"). These officials have confirmed that HP's understanding of the legal status of the ETSI HIPERLAN standard, as described in HP's petition,

is correct. Moreover, these officials have unequivocally assured HP that one watt EIRPEP HIPERLAN devices currently may be lawfully operated in the UK.

In light of the recent developments in Europe described in HP's petition, and under the reasoning adopted in the U-NII Report and Order, the proper time for the Commission to raise the U-NII power limits for the 5.15-5.25 GHz band is now, rather than at some theoretical future date.

None of the parties opposing HP's petition overcomes the simple logic of HP's request. Rather, these parties raise a series of flawed objections to HP's petition, each of which should be disregarded.

First, HP's petition is not procedurally defective. As a matter of Commission procedure, HP's request is properly raised at this time. HP has brought to the Commission's attention new facts that demonstrate that one watt HIPERLAN transmitters are a reality, rather than a possible future development. These developments occurred after the comment cycle closed in this proceeding and, therefore, properly are raised in a petition for reconsideration.

Second, a technical analysis is not necessary to support HP's petition. HP's request does not rest on a theoretical claim that MSS systems can operate harmoniously with one watt U-NII transmitters. Rather, HP's petition relies on the fact that much of Europe already has agreed to permit the operation of one watt unlicensed transmitters in the 5.15-5.25 GHz band. Because MSS systems no longer can ignore one watt unlicensed devices, there is no need for the FCC to defer authorizing power levels of up to one watt in the 5.15-5.25 GHz band within the United States.

Third, HP has identified the benefits of granting its petition. The requested increase in authorized power will provide manufacturers with greater flexibility to develop more robust and longer range devices, without having to move to the other segments of the U-NII band. Contrary to the assumption of some of the parties opposing HP's petition, the three U-NII sub-bands are not fungible. A manufacturer may prefer to operate in the 5.15-5.25 GHz band because, for example, it is designing products for a global market, including Europe. A manufacturer also may find it necessary to operate across the two contiguous 100 MHz U-NII sub-bands to maximize the efficiency of certain products, such as wireless LANs. Finally, some devices will be designed to select frequencies from each of the two contiguous U-NII sub-bands in order to overcome conditions of local interference.

Perhaps most importantly, granting HP's petition will promote international harmonization of the technical standards for unlicensed 5 GHz devices and expand the opportunities for manufacturers to design products suitable for both United States and European markets. Even assuming for the sake of argument that LQL's claim that these benefits would not justify imposing additional burdens on MSS licensees is correct, these benefits clearly justify granting HP's petition where as here, the decision to permit one watt unlicensed transmitters already has been made in Europe and, as a result, the concerns cited by the MSS interests are already unavoidable.

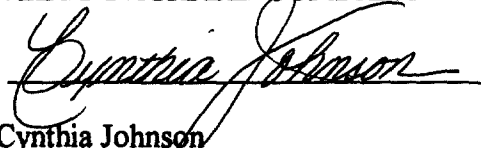
HP's petition, moreover, raises no issue of regulatory parity. To the contrary, it is fully consistent with the Commission's express decision in the U-NII Report and Order that long distance U-NII devices and associated operations do not need to be licensed in order to provide regulatory parity with licensed services.

For the foregoing reasons, HP respectfully requests that the Commission conform the U-NII power levels for the 5.15-5.25 GHz band to those already adopted in twenty European states, and authorize U-NII devices operating in this sub-band to employ up to one watt of power.

Finally, HP also continues to support the petition for reconsideration and clarification filed by WINForum. WINForum suggested a number of clarifications to the Commission's U-NII technical rules that, if granted, will prevent unnecessarily restrictive interpretations and confusion on the part of manufacturers and users. WINForum's suggestions were almost universally supported (or, at a minimum, not opposed) by the commenting parties, and the Commission therefore should grant WINForum's petition.

Respectfully submitted,

HEWLETT-PACKARD COMPANY

By: 

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April 14, 1997

DECLARATION

1. I, Timothy Wilkinson, am Project Manager, Hewlett-Packard Laboratories, Bristol, United Kingdom.
2. I have been closely associated with the European HIPERLAN standard development since November, 1992.
3. I am familiar with the Petition for Reconsideration filed by Hewlett-Packard Company ("HP") on March 3, 1997, and with the HP Reply Comments to which this declaration is attached.
4. I have reviewed the ETSI Technical Specification Standard for HIPERLAN (ETS 300 652); the European Radiocommunications Committee's decision of 7 March 1996 on the harmonised frequency band to be designated for the introduction of High Performance Radio Local Area Networks (HIPERLANs) (ERC/DEC(96)03) effective July 1, 1996; and the ETSI type approval documents setting forth the methods for testing HIPERLAN products to assure compliance with ETS 300 652 (ETS 300 836-1 Radio Type Approval; ETS 300 836-2 PICS). Based upon my review of the documents described in paragraph 4, above, I have concluded that the ETSI HIPERLAN standard contains specifications for three transmit power levels (Class A, 10 mW (10 dBm); Class B, 100 mW (20 dBm), and Class C, 1 W (30 dBm)). The reason for these three power levels is to enable specification of acceptable combinations of transmit power and receiver sensitivity for a given transceiver. There are correspondingly specifications for three receiver sensitivity levels (Class A, -50dBm; Class B, -60dBm, and Class C, -70dBm). Further, I have concluded that twenty European countries have agreed to support the ETSI standard in full, including all of the power levels contained in it. As a result, I have concluded that, in these twenty countries, one Watt HIPERLAN devices currently may be deployed in the 5.15-5.25 GHz band.
5. On April 8, 1997, I spoke with Steven Ring of LSI Logic Europe PLC. Mr. Ring is the editor of the HIPERLAN type approval documents described in paragraph 4, above. Mr. Ring verified the contents of these documents and confirmed my understanding that the intent of these documents is to permit the operation of one Watt HIPERLAN devices in the 5.15-5.25 GHz band.
6. In addition, on April 8, 1997, I spoke with staff members of the United Kingdom Radiocommunications Agency ("UK RA"), who confirmed that my understanding of the legal status of the ETSI HIPERLAN standard, as described in paragraph 4, above, is correct, and unequivocally assured me that one Watt EIRPEP HIPERLAN devices currently may lawfully be operated in the UK.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Signed this 14TH day of April, 1997, in Bristol, United Kingdom.



Timothy Wilkinson
Project Manager
Hewlett-Packard Laboratories, UK

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Consolidated Reply to Oppositions to Petition for Reconsideration was sent by first-class mail, postage prepaid, this 14th day of April, 1997, to each of the following:

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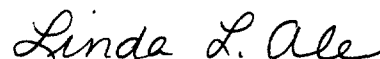
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